ABSTRACT OF THE DISCLOSURE

An optical communications system is adapted for connection to an optical fiber link of an optical communications network. The system obtains a fiber identifier respecting the optical fiber link; a respective optimum setting of one or more parameters of the optical communications system; and adjusts a respective value of each parameter in accordance with the respective optimum setting. The fiber identifier can be obtained from a value of at least one fiber transmission property of the optical fiber link. The fiber transmission property value is used to search a look-up table of class definitions, each class definition including a respective class identifier and at least one corresponding characteristic transmission property value. A class identifier is selected as the fiber identifier from the class definition for which each characteristic transmission property value most closely matches a corresponding fiber transmission property value. Each class definition may also include an optimum setting for each parameter.